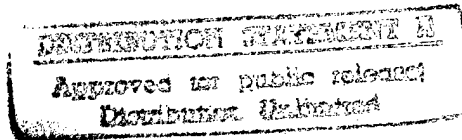


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# Russia's Air Force

## An Institution in Painful Transition

Since the end of the cold war and the breakup of the USSR, it has become increasingly possible to study Russian air power much as one would study military aviation in other countries. Russian defense literature now provides extensive factual reportage on defense matters, and Russia's military leaders have shown a new willingness to engage in dialogue with Western defense experts. While Russia is by no means an open book on defense-related subjects, researchers have been able to obtain an unprecedented level of information about the Russian air force (*Voennno-vozdushniye sily*, or VVS) as it prepares itself for the 21st century.

A recent RAND study examines the major challenges facing Russia's air force leadership during this post-Soviet era of transition. Exploring VVS reorganization, force development, operations and training, roles and missions, and its combat test in Chechnya, the study depicts a beleaguered institution that has lost much effectiveness and prestige. The author believes that the VVS's commander in chief, General Peter S. Deinekin, and his key deputies understand its problems and are working hard to correct them. He concludes, however, that the fate of the VVS will be determined by economic and political factors that lie almost completely beyond the military leadership's control.

### A MULTITUDE OF PRESSURES

The end of the cold war and the demise of the Warsaw Pact left the VVS with no clear mission beyond homeland defense at Russia's western edge, a responsibility for which it was ill configured. Additionally, VVS leaders have had to contend with a host of issues that include declining aircrew morale and retention, an eroding quality and number of applicants to pilot training schools, and appalling living conditions for aircrews and

their families. During the past four years, as the VVS underwent a massive drawdown, its leaders consolidated its functions and tried to develop new concepts appropriate to Russia's post-cold war security challenges. One key reform was the reorganization of the VVS under four major commands: Long-Range Aviation, Military Transport Aviation, Frontal Aviation, and Reserve and Training (the latter two both new commands). However, efforts to build on such steps and institute sweeping changes have been continually undermined by a severe budget crisis that not only postpones improvements but also steadily reduces the inventory of available aircraft across the commands.

### AIRCRAFT REDUCTIONS

Frontal Aviation has shrunk from a high of over 5,000 combat aircraft in 1989 to less than half that number today. Of these, around a third are fourth-generation MiG-29s and Su-27s. The remainder are older aircraft slated to be retired before the end of the decade. If current budget trends continue, Frontal Aviation's holdings, by the VVS's own estimate, will decline to 1,440 aircraft by the end of the decade and to 870 by the year 2015.

Long-Range Aviation, which has shed much of its intercontinental nuclear attack role and replaced it with a new mission of providing strategic reach in support of Russia's regional power-projection needs, has also experienced a significant drawdown since the late 1980s. Its total number of aircraft has dropped from over 700 to about 400, and many of its most modern bombers have been lost to the newly independent states.

The most painful post-Soviet loss for the VVS was registered in Military Transport Aviation. A large portion of its Il-76 jet transports (200 out of the 450 possessed by

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the USSR) was based in Ukraine, a loss that was especially acute in light of Russia's new regional peacekeeping challenges. Russia's Air Defense Force has likewise experienced a sharp rate of decline: From a high of 2,300 interceptors on the eve of the USSR's collapse, it is down to less than half that number today.

## STARVED FOR FUNDS

In the past several years, appropriations for procurement have fallen so sharply that the VVS cannot hope to obtain its annual requirement of 250–300 new aircraft to replace those slated for retirement over the next ten years. In 1994, the defense budget provided for only 32 aircraft for all services—a number that was reduced to zero in the budget for 1995. Meanwhile, force modernization has almost ground to a halt, and even R&D for improvement of existing systems has virtually dried up. Starved for funds, the VVS is barely meeting officers' payrolls. Fuel supplies are so low that only a small percentage of line pilots remain on operational flight status, and even those can barely maintain basic levels of competence. In most fighter units, operationally meaningful air-to-ground weapon delivery and maneuvering air combat training have become a thing of the past.

## AIR WAR IN CHECHNYA

The VVS leaders' fears about eroded capabilities were confirmed during Russia's assault against Chechnya, where the air force mission entailed backstopping ground troops in putting down a local rebellion. While airlift units performed commendably and combat aircraft did well in unopposed attacks against unsheltered Chechen aircraft, bombing inaccuracies in bad weather led to many friendly-fire losses. Most aircrews participating in the initial attacks had not flown more than 30 hours during the preceding year. Few were night-current or maintained any weapon-delivery proficiency. Although they were facing an unsophisticated ethnic opponent that presented no air-to-air threat and offered a permissive environment for attacking aircraft except at low altitude, these aircrews painfully showed the effects of their minimal training.

## NEW FIGHTER DEVELOPMENT

The war with Chechnya made it obvious that as long as the VVS remains financially deprived, it will constitute only a regional air arm with little sustainability or capacity for high-technology combat. A major step toward technological parity with major powers would be the development and production of a fifth-generation fighter, for which a prototype built by the Mikoyan Design Bureau is said to exist. However, the continuing economic crisis makes full-scale deployment of such a fighter unlikely any time soon. Russia faces no security challenge that would warrant the expenditure of scarce funds for this type of aircraft. For now, the VVS will most likely concentrate on other programs in the air-to-air mission area—including an active radar missile comparable to the American AIM-120 AMRAAM—that promise attractive returns at a fraction of the new fighter's likely cost.

## PROSPECTS

The reforms of the post-Soviet VVS are impressive: It has been granted an end to political controls, increased freedom of expression, genuine encouragement for the exercise of initiative and independent judgment, and an easing of the most odious former Soviet operating rules and restrictions. Yet the future of the VVS, like that of the Russian military as a whole, is ultimately tied to Russia's continuing political disarray and economic weakness. To enter the 21st century as a renewed institution, the VVS needs to form new strategies consistent with the emerging mission requirements of the new Russian state. However, Russia has yet to develop a coherent foreign policy, or even an agreed set of national interests upon which such a policy might be based. At the same time, the VVS desperately needs increased funding not only for force modernization and training but also for such basic demands as the housing of deprived personnel. Yet such funding will not be available until Russia emerges from its current fiscal crisis. For now, Russia's air force leadership can do little more than tighten belts and set the stage for a VVS recovery whenever political and fiscal realities will allow it to take place.

**50<sup>th</sup>**  
**Project AIR FORCE**  
1946–1996

RAND research briefs summarize research that has been more fully documented elsewhere. This research brief describes work done for RAND's Project AIR FORCE; it is documented in *Russia's Air Power at the Crossroads*, by Benjamin Lambeth, MR-623-AF, 1996, 298 pp., ISBN 0-8330-2426-4, available from RAND Distribution Services (Telephone: 310-451-7002; FAX: 310-451-6915; or Internet: [order@rand.org](mailto:order@rand.org)). Abstracts of all RAND documents may be viewed on the World Wide Web (<http://www.rand.org>). Publications are distributed to the trade by National Book Network. RAND is a nonprofit institution that helps improve public policy through research and analysis; its publications do not necessarily reflect the opinions or policies of its research sponsors.

## RAND

1700 Main Street, P.O. Box 2138, Santa Monica, California 90407-2138 • Telephone 310-393-0411 • FAX 310-393-4818  
1333 H St., N.W., Washington, D.C. 20005-4792 • Telephone 202-296-5000 • FAX 202-296-7960